

[54] **PERSONAL COMPUTER—AS AN INTERFACE BETWEEN A TELEPHONE STATION SET AND A BUSINESS COMMUNICATION SYSTEM**

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[56] **References Cited**

U.S. PATENT DOCUMENTS

4,112,258	9/1978	Alles	179/15 AT
4,330,886	5/1982	Fukuda et al.	379/93 X
4,375,582	3/1983	Gist et al.	379/96
4,387,440	6/1983	Eaton	379/94 X
4,475,189	10/1984	Herr et al.	379/93 X
4,481,574	11/1984	DeFino et al.	379/93
4,503,288	3/1985	Kessler	379/96 X
4,524,244	6/1985	Faggin et al.	379/93
4,532,377	7/1985	Zink	379/94
4,534,023	8/1985	Peck et al.	370/58
4,535,198	8/1985	Squicciarini	179/2 DP
4,640,989	2/1987	Riner et al.	379/96 X

FOREIGN PATENT DOCUMENTS

60-154767 8/1985 Japan

OTHER PUBLICATIONS

BIZCOMP, brochure: "There's Only One PC/XT"

Modem Designed to Let Both You and Your Computer Talk on the Same Line", modem introduced in 1983.

N. Accarino et al., entitled "Frame-Mode Customer Access to Local Integrated Voice and Data Digital Network", published in the Conference Report of the IEEE 1979 International Conference on Communications, pp. 38.5.1-38.5.7.

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[57] **ABSTRACT**

This invention is an interface arrangement which interconnects a business communication system with a telephone station set. This interface is implemented in a personal computer which serves to control the operation of the associated telephone station set and also provide business communication services. All signaling from the business communication system is received by the personal computer, interpreted, and appropriate control signals are then forwarded under control of the software resident on the personal computer to activate the digital telephone station set. The signals from the digital telephone station set are intercepted by the personal computer, interpreted, modified and appropriate control messages and signaling are then forwarded by the personal computer to the business communication system.

This arrangement enables a user to create software on the personal computer to control the operation of the telephone station set associated with the personal computer. The user can implement new features and services independent of the operation of the business communication system.

39 Claims, 8 Drawing Sheets

